

CLAIMS:

1. A method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including the subscriber's TA (Transport Address);

forwarding a location update from the S-CSCF to an HSS (Home Subscription Server) including the subscriber's TA and the S-CSCF address; and

storing data including the subscriber's in the HSS so as to be protected against loss.

2. The method of claim 1, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in the HSS.

3. The method of claim 1, wherein storing data in the HSS comprises storing data in a non-volatile memory in the HSS.

4. The method of claim 3, wherein storing data in a non-volatile memory in the HSS comprises storing data in a hard disk drive.

5. A method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including the subscriber's TA (Transport Address);

forwarding a location update from the S-CSCF to an HSS (Home Subscription Server) including the subscriber's TA; and

storing data including the subscriber's TA in the S-CSCF so as to be protected against loss.

6. The method of claim 5, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in a non-volatile memory in the S-CSCF.

7. The method of claim 6, wherein storing data in a non-volatile memory in the S-CSCF comprises storing data in a hard disk drive.

8. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including the subscriber's TA (Transport Address);

forwarding a location update from the S-CSCF to an HSS (Home Subscription Server) including the subscriber's TA and the S-CSCF address; and

storing data including the subscriber's TA in the HSS so as to be protected against loss.

9. The program storage device of claim 8, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in the HSS.

10. The program storage device of claim 8, wherein storing data in the HSS comprises storing data in a non-volatile memory in the HSS.

11. The program storage device of claim 10, wherein storing data in a non-volatile memory in the HSS comprises storing data in a hard disk drive.

12. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to an S-CSCF (Serving-Call State Control Function) including the subscriber's TA (Transport Address);

forwarding a location update from the S-CSCF to an HSS (Home Subscription Server) including the subscriber's TA; and

storing data including the subscriber's TA in the S-CSCF so as to be protected against loss.

13. The program storage device of claim 10, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in a non-volatile memory in the S-CSCF.

14. The program storage device of claim 13, wherein storing data in a non-volatile memory in the S-CSCF comprises storing data in a hard disk drive.

15. A method of recovering location information of a subscriber in a mobile network, the method comprising:

upon an S-CSCF (Serving-Call State Control Function) receiving a call setup request for the subscriber from an I-CSCF (Interrogating-Call State Control Function), forwarding a route request to a UMS (User Mobility Server) and receiving a home address of the subscriber;

forwarding the call setup request from the S-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber; and

forwarding an address update from the subscriber to the S-CSCF.

16. The method of claim 15, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care-Of Address of the subscriber.

17. The method of claim 15, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

18. The method of claim 16, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

19. A method of recovering location information of a subscriber in a mobile network, the method comprising:

upon an I-CSCF (Interrogating-Call State Control Function) receiving a call setup request for the subscriber, forwarding a route request to a UMS (User Mobility Server) and receiving a home address of the subscriber;

forwarding the call setup request from the I-CSCF to a home agent at the home address of the subscriber;
forwarding the call setup request from the home agent to the subscriber; and

forwarding an address update from the subscriber to the I-CSCF.

20. The method of claim 19, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

21. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber and a mobile network, the method comprising:

upon an S-CSCF (Serving-Call State Control Function) receiving a call setup request for the subscriber from an I-CSCF (Interrogating-Call State Control Function), forwarding a route request to a UMS (User Mobility Server) and receiving a home address of the subscriber;

forwarding the call setup request from the S-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber; and

forwarding an address update from the subscriber to the S-CSCF.

22. The program storage device of claim 21, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care-Of Address of the subscriber.

23. The program storage device of claim 21, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

24. The program storage device of claim 22, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

25. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber and a mobile network, the method comprising:

upon an I-CSCF (Interrogating-Call State Control Function) receiving a call setup request for the subscriber, forwarding a route request to a UMS (User Mobility Server) and receiving a home address of the subscriber;

forwarding the call setup request from the I-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber; and

forwarding an address update from the subscriber to the I-CSCF.

26. The program storage device of claim 25, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care-Of Address of the subscriber.

27. The program storage device of claim 25, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.

28. The program storage device of claim 26, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care-Of Address of the subscriber.